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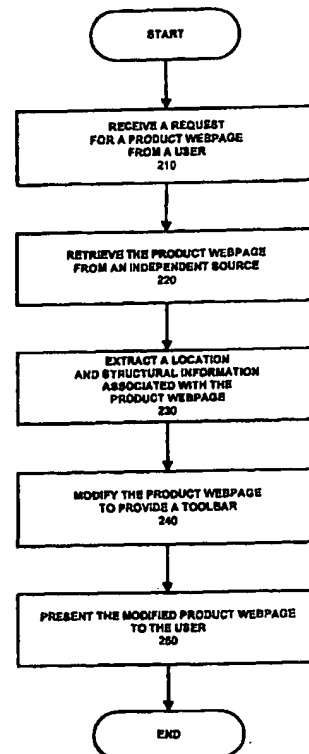
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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US00/00447  <b>(22) International Filing Date:</b> 10 January 2000 (10.01.00)  <b>(30) Priority Data:</b> 09/232,052      15 January 1999 (15.01.99)      US  <b>(71) Applicant:</b> WISH-LIST.COM [US/US]; Suite 8, 1148 Tenth Street, Manhattan Beach, CA 90266 (US).  <b>(72) Inventor:</b> KRAEMER, Keith, M.; Suite 8, 1148 Tenth Street, Manhattan Beach, CA 90266 (US).  <b>(74) Agent:</b> WARHOLA, Stephen; Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050 (US).		<b>(81) Designated States:</b> AT, AU, BB, BR, CA, CH, CN, CR, CU, DE, DK, DM, ES, FI, GB, GD, ID, IL, IN, JP, KP, KR, LU, MX, NO, NZ, PT, RO, RU, SE, SG, SI, TT, ZA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.          Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> METHOD AND APPARATUS FOR PROVIDING A UNIFIED PRODUCT SELECTION AND ORDERING INTERFACE TO PRODUCT WEBPAGES OF MULTIPLE RETAILERS  <b>(57) Abstract</b>  A method and apparatus for providing enhanced functionality to product webpages is described. This method and apparatus may be used to provide a unified toolbar across product webpages of multiple, independent retailers. This toolbar may be used to create a gift registry across multiple retailers, to create an inter-retailer shopping cart and automate purchases, to create an inter-retailer advertising network, and to create a virtual network of retailers with a multitude of services spanning them.		



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METHOD AND APPARATUS FOR PROVIDING AN UNIFIED PRODUCT SELECTION AND ORDERING  
INTERFACE TO PRODUCT WEBPAGES OF MULTIPLE RETAILERS

BACKGROUND OF THE INVENTION

5     Field of the Invention

The present invention relates to a method and apparatus for providing enhanced functionality to webpages. More particularly, the present invention relates to a method and apparatus for providing a unified gift registry which allows user to register and purchase gifts from multiple retailers.

10

Description of Related Art

Gift registries are often created for special occasions such as weddings. Gift-recipients visit a retailer to select and register a list of desired gifts. Gift-givers then visit the retailer to select and purchase a gift from this list. The gift is then marked as purchased and therefore no longer available for purchase by a subsequent gift-giver.

Gift registries are typically separately maintained at each store and are particular to each store. This requires both gift-recipients and gift-givers to visit the same store. Gift registries are often maintained on a single non-networked computer within the individual store to automate the bookkeeping functions.

Gift registries may also be implemented on a computer network, which provides improved access to other stores of the same retailer as well as gift-givers. For example, a private network between stores associated with the same retailer allows gift-recipients and gift-givers to visit any store which is part of the network to register or purchase gifts. As another example, a publicly accessible network such as the Internet allows gift-recipients and gift-givers to register and purchase gifts from a computer with Internet access. Such networked gift registries are currently provided by numerous individual retailers.

However, these networked gift registries are particular to each retailer and are designed to work only with stores of the same retailer, and are limited to products available in the stores of the same retailer.

5       Currently, gift-recipients wishing to register gifts from more than one retailer must visit each retailer, create a new registry account, and go through the oftentimes laborious process of selecting and registering gifts to be placed on their registry. This process must be repeated for every retailer involved, each process varying in number of steps and degree of difficulty. Gift-givers wishing to purchase these registered gifts must determine which stores to shop at, look  
10       up each registry, and purchase the gift through the supplying retailer. Both the gift-recipient and the gift-giver are inconvenienced by a narrower product selection, store location, inability to reconcile registry lists across multiple retailers, and the degree of effort required.

15       Furthermore, gift registry services offered by just one retailer often contain erroneous listings, untimely updates of product selection and purchase status, and may lead to duplicate gift purchases.

20       Current gift registry solutions require the retailer to offer their own registry services for their own product selection. However, it is difficult for many retailers to carry a sufficient number of products to provide the product selection consumers often desire.

25       What is needed is a single gift registry service that is compatible with more than one retailer. What is needed is a gift registry solution which allows a gift-recipient to visit a single location and create a gift registry which includes products from more than one retailer. What is also needed is a gift registry solution which allows a gift-giver to visit a single location and access a gift  
registry which includes products from more than one retailer.

### SUMMARY OF THE INVENTION

30       The present invention is directed towards a computer implemented method for providing enhanced functionality to product webpages. One embodiment of the method comprises: receiving a request for a product

webpage from a user, the product webpage being associated with a product and an independent vendor; retrieving the product webpage from an independent source; extracting a location and structural information associated with the product webpage; modifying the product webpage to provide a toolbar, the toolbar having at least one command associated with the product; and presenting the modified product webpage to the user.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A shows a typical network in which the method of the present invention may be practiced.

FIGS. 1B-1C show embodiments of toolbars which may be provided by the method and apparatus of the present invention.

FIG. 2 shows one embodiment of a method of the present invention for providing enhanced functionality to product webpages.

### DETAILED DESCRIPTION OF THE INVENTION

The present invention provides a method and apparatus for providing enhanced functionality to webpages.

FIGURE 1A shows a typical network in which the method and apparatus of the present invention may be practiced. An enhanced functionality server 100 is connected through a wide area network 110 to client devices 120, each of which includes a browser. Enhanced functionality server 100 is also connected through wide area network 110 to a plurality of independent sources 130.

Enhanced functionality server 100 may be a more than one server. Wide area network 110 may be the Internet, a virtual private network, or other network. Client devices 120 may be a computer, a personal digital assistant, or other suitable networkable device. Independent sources 130 may be webpage servers associated with independent retailers or vendors.

A user uses client device 120 to connect to wide area network 110 and access enhanced functionality server 100. Once connected to enhanced functionality server 110, the user may use the browser to access independent

sources 130 just as normal. However, enhanced functionality server 100 intercepts the transmissions between client device 120 and independent sources 130 and is capable of adding tools and services to these transmissions.

Enhanced functionality server 100 thus behaves similar to a proxy server, but provides enhanced functionality. Enhanced functionality server 100 is capable of "following" the user and recording user behavior as the user access independent sources.

FIGURES 1B and 1C show enhanced functionality toolbars. Enhanced functionality server 100 is capable of providing a toolbar 150 which looks and behaves the same regardless of which independent source 130 the user happens to be visiting. For example, toolbar 150 may provide services such as "Purchase this product" or "Register this product". Enhanced functionality server 100 is also capable of collecting and storing information specific to a user in order to facilitate completion of these services. For example, enhanced functionality server 100 may prompt the user for name, address, and credit card information, and then automatically fill out order forms on an order page to fulfill a "Purchase this product" request.

FIGURE 2 shows one embodiment of a method of the present invention for providing enhanced functionality to product webpages. The method includes: (1) receiving a request for a product webpage from a user, the product webpage being associated with a product and an independent vendor (block 210); (2) retrieving the product webpage from an independent source (block 220); (3) extracting a location and structural information associated with the product webpage (block 230); (4) modifying the product webpage to provide a toolbar, the toolbar having at least one command associated with the product (block 240); and (5) presenting the modified product webpage to the user (block 250).

Receiving a request for a product webpage from a user, the product webpage being associated with a product and an independent vendor (block 210). In one embodiment, enhanced functionality server 100 receives a request for a product webpage, although this request may also be processed by browser

on client device 120. In an Internet environment, this request would be in the form of a URL request. The product webpage may be associated with any product and vendor. The vendor may be independent of enhanced functionality server 100, and administers its website and server independently of enhanced functionality server 100.

Retrieving the product webpage from an independent source (block 220). In an Internet environment, enhanced functionality server 100 sends the URL request and obtains the HTML form of the product webpage. Again, the product webpage may reside on a server which is administered separately and independently of enhanced functionality server 100.

Extracting a location and structural information associated with the product webpage (block 230) may include: (1) parsing the product webpage into webpage elements (block 232); (2) analyzing the webpage elements to identify location and structural information (block 234); and (3) storing the location and structural information (block 236). The product webpage may be written in a markup language such as HTML, in which case extracting may include: (1) parsing the product webpage according to HTML tags; (2) analyzing the HTML tags and accompanying text to identify URL and frameset information, and (3) storing the URL and frameset information.

Modifying the product webpage to provide a toolbar, the toolbar having at least one command associated with the product (block 240). Toolbar 150 provides enhanced functionality, such as services "Purchase this product" or "Register this product." Toolbar 150 may also provide other general functions such as "Home" and "Help". Toolbar 150 may also include a graphical presentation such as an advertisement. Toolbar 150 may be provided in a space inserted at a top, bottom, side, or any desired location in the product webpage. Toolbar 150 may actually be a part of the webpage, or provided in a separate frame or floating window. If the product webpage is written in HTML, toolbar 150 may be inserted after the <BODY> marker of the webpage, or after any other suitable marker. The toolbox window may also be configured to be always visible, allowing the user to select options from the toolbox window at



any time. Toolbar 150 may be tailored specifically for the product webpage, if the product webpage is identified first by comparing its webpage elements to a database of known webpages, or toolbar 150 may be generic. Toolbar 150 may also include sponsored presentations such as advertising banners.

5           The method may further include: (6) obtaining information about the user (block 260); and (7) storing the information about the user in an account associated with the user (block 270).

          Obtaining information about the user (block 260) may include obtaining any one or more of a name, address, phone number, credit card and payment  
10   information, personal preferences, and demographic information about the user. Storing the information about the user in an account associated with the user (block 270) may include accessing a existing account or creating a new account, and storing the information in this account. This user information may be used to facilitate future transactions such as purchasing the product. This user  
15   information may also be used to help select advertisements specifically targeted to the user.

          The method may further include: (8) receiving a product registration command associated with the product from the user (block 280); (9) adding the  
20   product to a list of products in the account associated with the user (block 290); and (10) adding a location and structural information associated with the product webpage in the account associated with the user (block 2100). These three steps may also be performed before any personal information about the user is obtained.

          The method may further include: (11) obtaining information about a  
25   purchaser (block 2110); (12) receiving a purchase command associated with the product from the purchaser (block 2120); (13) modifying the purchase command with the information about the purchaser (block 2130); and (14) sending the modified purchase command to the vendor (block 2140).

          Enhanced functionality server 100 may include a database of vendor  
30   webpages which includes information about the purchase forms. When a purchase command is received, enhanced functionality server 100 is capable of

automatically filling out the purchase forms using information obtained earlier about the purchaser. The purchase transaction is thus facilitated by enhanced functionality server 100.

5 Another alternate embodiment of a method for providing enhanced functionality to product webpages comprises: receiving a request for a product webpage from a user, the product webpage being associated with a product and an independent vendor; retrieving the product webpage from an independent source associated with the vendor; extracting a location and structural information associated with the product webpage; modifying the product  
10 webpage to provide a toolbar, the toolbar having at least one command associated with the product; presenting the modified product webpage to the user; receiving a subsequent request for the product webpage; presenting the product webpage using the location and the structural information associated with the product webpage; presenting the product webpage to the user.

15 Yet another alternate embodiment of a method for providing enhanced functionality to product webpages comprises: presenting a list of vendor webpages to a user, the vendor webpages being associated with a plurality of vendors; receiving a request for a particular vendor webpage from the user, the particular vendor webpage being associated with a particular vendor; presenting  
20 a list of product webpages to the user, the product webpages being associated with a plurality of products, the plurality of products being associated with the particular vendor; receiving a request for a particular product webpage, the particular product webpage being associated with a particular product; retrieving the particular product webpage; obtaining a location and structural information  
25 associated with the particular product webpage; modifying the particular product webpage to provide a toolbar, the toolbar having at least one command associated with the particular product; presenting the modified particular product webpage to the user; receiving the command associated with the particular product from the user; and storing information about the particular  
30 product in a list of products associated with the user.

EXAMPLE 1

This example describes how the method of the present invention may be used to allow a gift-recipient to create a gift registry such as a bridal registry. The gift-recipient is able to select and register gifts from multiple retailers, not just from a single store or chain of retailers.

Although this example uses the Internet, the present invention need not be implemented only within the context of the Internet, but may be implemented within any computer network. An Internet implementation allows both the gift-recipient and gift-buyer convenient access the registry and convenient fulfillment of requested transactions.

A gift-recipient accesses enhanced functionality server 100 and then browses vendor and product webpages normally. Enhanced functionality server 100 may present a list of retailers. The list of retailers may be a suggested or preferred list of retailers, or prepared in response to the gift-recipient's previous selections. However, the gift-recipient is also able to shop at unlisted retailers, the supplied list provided only for the gift-recipient's convenience. The gift-recipient selects a link to the retailer website of their choice by clicking on the appropriate listing as displayed on their browser. Enhanced functionality server 100 "follows" the gift-recipient and stores information about the webpages the gift-recipient has visited. The gift-recipient may request any particular product webpage.

1. Receiving a request for a product webpage from a user, the product webpage being associated with a product and an independent vendor. Enhanced functionality server 100 receives the requests for product webpages as the gift-recipient is browsing.
  2. Retrieving the product webpage from an independent source.
  3. Extracting a location and structural information associated with the product webpage.
- The product webpage is parsed into its webpage elements and analyzed. Its URL and frameset information is extracted and stored. This allows

the product webpage to be reconstructed when it is subsequently requested by a gift-giver.

4. Modifying the product webpage to provide a toolbar, the toolbar having at least one command associated with the product.

5 A toolbox is inserted at the top of the webpage, after the <BODY> marker. The toolbox includes a "Register this gift" and "Purchase this gift" buttons. Elements in the HTML code are analyzed and adjusted in preparation to be re-served from enhanced functionality server 100. References to resources on a retailer's website are adjusted so that the resulting HTML code can be served from enhanced functionality server 100 with no broken references.

5. Presenting the modified product webpage to the user.  
After the toolbar is provided, the product webpage earlier requested by the gift-recipient is presented to the gift-recipient.

- 15 6. Receiving a product registration command associated with the product from the user.

The gift-recipient may continue browsing product webpages until a desired gift is reached. At this point, the gift-recipient may select the "Register this gift" button provided by toolbar 150.

- 20 7. Adding the product to a list of products in the account associated with the user.  
Sufficient information about the retailer and product are gathered and stored in an account created for the gift-recipient to enable the product to be purchased at a later date.

- 25 8. Adding a location and structural information associated with the product webpage in the account associated with the user.

The URL and frameset structure of the product webpage is stored in the account.

9. Obtaining information about the user.

30 For a new gift-recipient, enhanced functionality server 100 may present the gift-recipient with a series of forms to be filled out in order to obtain

personal information including name, address, phone number, occasion date, occasion name, special requests such as product colors or product sizes, and other personal attributes.

10. Storing the information about the user in an account associated with the user.

The information about the gift-recipient is added to the the gift being registered and the URL and frameset structure of the gift's webpage in the gift-recipient's account. The account may be kept private with an identification and password authentication scheme. At the completion of registering the gift, the user may be redirected back to the original product webpage where the user first selected "Register this gift" from the toolbox.

11. Obtaining information about a purchaser.

A gift-giver accesses the gift-recipient's gift registry by accessing enhanced functionality server 100. Enhanced functionality server 100 may use a series of question and answer forms to obtain information about the gift-giver, such as name and credit card information, and to make sure the gift-giver accesses the proper gift-recipient's gift registry. Having positively identified and supplied the correct authentication, the gift-giver may be presented with a series of screens, the total of which displays the gift-recipient's list of registered gifts. The gift-recipient's account is displayed, along with a registry list which is a list of links, one for each gift registered by the gift-recipient. Products are listed by title offering the gift-giver a way to review each registered gift. Each listing also displays the gift's purchase status (reserved or available), and offers the gift-giver the option to view more details on the gift and to purchase the gift. The gift-giver may freely browse the product webpages, which are modified to include toolbar 150 in the same way as when the gift-recipient had browsed the product webpages. To do this, information about the selected gift, and its URL and frameset structure is retrieved from where it was stored earlier.

12. Receiving a purchase command associated with the product from the purchaser.

Having reviewed a particular gift, and chosen to purchase it, the gift-giver may select the "Purchase this gift" option from the toolbar.

5 Additional information may be obtained from the gift-giver such as the quantity being purchased.

13. Modifying the purchase command with the information about the purchaser.

10 The information obtained earlier about the gift-giver is used to automatically fill out the necessary forms on the vendor's website to purchase the gift. Groups of elements of the webpage may be compared to a database of webpage elements as provided by participating websites. The comparison is made to find a match and therefore determine how enhanced functionality server 100 may communicate a purchase

15 transaction, and other events, to the participating website. Otherwise, elements of the webpage may be interpreted by a linguistics algorithm to determine how to communicate a purchase transaction, or other events, to the website.

14. Sending the modified purchase command to the vendor.

20 The original purchase request, as intercepted by enhanced functionality server, is passed on to the gift's retailer. The retailer's own sequence of purchase forms finishes the purchase transaction for the user in the normal fashion. The gift's purchase status within the gift-recipient's account is appropriately updated to inform future gift-givers and to avoid

25 duplicate purchases for the same gift.

### EXAMPLE 2

The method of the present invention may be applied to allow users browse multiple retailers and automatically submit credit card purchases to

30 retailers, thereby increasing convenience for the user. In this example, the user may select a "Purchase this product" option from the toolbox, much the same

way it is explained how users select "Register this gift". The product's webpage may be analyzed, and then the user's credit card and contact information automatically submitted to the retailer as a purchase request to complete the transaction in one automated step.

5

### EXAMPLE 3

The method of the present invention may be used to devise a multi-retailer shopping cart, whereby the user can accumulate multiple products from independent retailers within a single virtual shopping cart. The user may select a "Purchase all products" within the toolbox to submit their credit card and contact information to all the retailers, for all the products within their shopping cart, all at once. Purchasing multiple products from multiple retailers all at once significantly increases convenience for the user.

10

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### EXAMPLE 4

The method of the present invention may be used to analyze the shopping behavior of the user, thereby recording valuable marketing information. In this example, detailed information about each page the consumer views may be analyzed, categorized, and stored as data used for marketing purposes in predicting future or related consumer behaviors, and for targeted advertising.

20

### EXAMPLE 5

The method of the present invention may be used to create a virtual shopping agent to automate repetitive shopping tasks as learned by analyzing the user's shopping habits. For example, the process of visiting their favorite retailers and looking for similar types of products can be automated for the user. Automated shopping agents may gather information on the user's favorite product sets and retailers, may retrieve, analyze and store product webpages within the user's account, and may notify the user when prices or product

25

30

availability changes. The user benefits from increased convenience via automated and personalized shopping.

#### EXAMPLE 6

5           The method of the present invention may be used to create a virtual network of retailer websites (or websites in general) with enhanced consumer services across an aggregated collection of retailers. For example, the basic utility of parsing and modifying webpages across multiple retailers allows for groups of retailer shops to be connected to each other via links within toolbox  
10       150. Such interconnections between retailers allows for special inter-retailer promotions, and product cross selling. Purchase events within retailer A's site may trigger suggestive selling for retailer B's complementary products, whereby retailer A benefits from commissions on retailer B's sales, and retailer B benefits from increased sales volumes.

15           The foregoing description of the invention has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations will be apparent. It is intended that the scope of the invention be  
20       defined by the following claims and their equivalents.

What is claimed is:



**CLAIMS**

1. A computer implemented method for providing enhanced functionality to product webpages, the method comprising:
  - receiving a request for a product webpage from a user, the product
  - 5 webpage being associated with a product and an independent vendor;
  - retrieving the product webpage from an independent source;
  - extracting a location and structural information associated with the product webpage;
  - modifying the product webpage to provide a toolbar, the toolbar having
  - 10 at least one command associated with the product; and
  - presenting the modified product webpage to the user.
2. The method of claim 1, wherein extracting includes:
  - parsing the product webpage into webpage elements;
  - 15 analyzing the webpage elements to identify location and structural information; and
  - storing the location and the structural information.
3. The method of claim 1, wherein the toolbar is provided in a
- 20 space inserted at a top of the product webpage.
4. The method of claim 1, wherein the toolbar is provided in a separate frame.
5. The method of claim 4, wherein the separate frame is a floating
- 25 window.
6. The method of claim 1, wherein the webpage is written in a markup language.
- 30 7. The method of claim 6, wherein the markup language is HTML.

8. The method of claim 7, wherein extracting includes:  
parsing the product webpage according to HTML tags;  
analyzing the HTML tags and accompanying text to identify URL and  
frameset information; and  
5 storing the URL and the frameset information.
9. The method of claim 7, wherein modifying includes:  
inserting a toolbar after the <BODY> marker of the product webpage.
10. The method of claim 1, further comprising:  
obtaining information about the user; and  
storing the information about the user in an account associated with the  
user.
11. The method of claim 10, wherein the information about the user  
includes a name, an address, and a phone number associated with the user.
12. The method of claim 10, wherein the information about the user  
includes credit card and payment information associated with the user.
13. The method of claim 10, wherein the information about the user  
includes personal preferences associated with the user.
14. The method of claim 10, wherein the information about the user  
includes demographic information associated with the user.
15. The method of claim 10, further comprising:  
receiving a product registration command associated with the product  
from the user;  
30 adding the product to a list of products in the account associated with the  
user; and

adding a location and structural information associated with the product webpage in the account associated with the user.

5           16.    The method of claim 1, further comprising:  
              adding information associated with the product to the account associated  
              with the user.

              17.    The method of claim 15, further comprising:  
                  obtaining information about a purchaser;  
10               receiving a purchase command associated with the product from the  
                  purchaser;  
                  modifying the purchase command with the information about the  
                  purchaser; and  
                  sending the modified purchase command to the vendor.

15           18.    The method of claim 17, wherein modifying includes:  
                  identifying the product webpage;  
                  retrieving instructions associated with completion of the command and  
                  the product;  
20               retrieving the information associated with the user;  
                  completing the command by using the instructions and the information  
                  associated with the user for the product webpage.

              19.    The method of claim 18, wherein identifying includes:  
25               extracting a location and structural information associated with the  
                  product webpage; and  
                  comparing the location and structural information with a database of  
                  known database of profiles.

30           20.    The method of claim 1, further comprising:  
                  receiving a subsequent request for the product webpage;

reconstructing the product webpage using the location and the structural information associated with the product webpage; and  
presenting the reconstructed product webpage.

5           21.    A computer implemented method for providing enhanced functionality to product webpages, the method comprising:  
              receiving a request for a product webpage from a user, the product webpage being associated with a product and an independent vendor;  
              retrieving the product webpage from an independent source associated  
10       with the vendor;  
              extracting a location and structural information associated with the product webpage;  
              modifying the product webpage to provide a toolbar, the toolbar having at least one command associated with the product;  
15       presenting the modified product webpage to the user;  
              receiving a subsequent request for the product webpage;  
              reconstructing the product webpage using the location and the structural information associated with the product webpage;  
              presenting the product webpage to the user.

20           22.    The method of claim 21, wherein extracting includes:  
              parsing the product webpage into webpage elements;  
              analyzing the webpage elements to identify location and structural information; and  
25       storing the location and the structural information.

              23.    The method of claim 21, wherein the toolbar is provided in a space inserted at a top of the product webpage.

30           24.    The method of claim 21, wherein the toolbar is provided in a separate frame.

25. The method of claim 24, wherein the separate frame is a floating window.

26. The method of claim 21, wherein the webpage is written in a markup language.

27. The method of claim 26, wherein the markup language is HTML.

28. The method of claim 27, wherein extracting includes:  
parsing the product webpage according to HTML tags;  
analyzing the HTML tags and accompanying text to identify URL and frameset information; and  
storing the URL and the frameset information.

29. The method of claim 27, wherein modifying includes:  
inserting a toolbar after the <BODY> marker of the product webpage.

30. The method of claim 21, further comprising:  
obtaining information about the user; and  
storing the information about the user in an account associated with the user.

31. The method of claim 30, wherein the information about the user includes a name, an address, and a phone number associated with the user.

32. The method of claim 30, wherein the information about the user includes credit card and payment information associated with the user.

33. The method of claim 30, wherein the information about the user includes personal preferences associated with the user.

34. The method of claim 30, wherein the information about the user includes demographic information associated with the user.

35. The method of claim 30, further comprising:  
5 receiving a product registration command associated with the product from the user;  
adding the product to a list of products in the account associated with the user; and  
adding a location and structural information associated with the product  
10 webpage in the account associated with the user.

36. The method of claim 21, further comprising:  
adding information associated with the product to the account associated  
with the user.

37. The method of claim 35, further comprising:  
obtaining information about a purchaser;  
receiving a purchase command associated with the product from the  
purchaser;  
20 modifying the purchase command with the information about the purchaser; and  
sending the modified purchase command to the vendor.

38. The method of claim 37, wherein modifying includes:  
25 identifying the product webpage;  
retrieving instructions associated with completion of the command and the product;  
retrieving the information associated with the user;  
completing the command by using the instructions and the information  
30 associated with the user for the product webpage.

39. The method of claim 38, wherein identifying includes:  
extracting a location and structural information associated with the  
product webpage; and  
comparing the location and structural information with a database of  
known database of profiles.

40. The method of claim 21, further comprising:  
receiving a subsequent request for the product webpage;  
reconstructing the product webpage using the location and the structural  
information associated with the product webpage; and  
presenting the reconstructed product webpage.

41. A computer implemented method for providing enhanced  
functionality to product webpages, the method comprising:  
presenting a list of vendor webpages to a user, the vendor webpages  
being associated with a plurality of vendors;  
receiving a request for a particular vendor webpage from the user, the  
particular vendor webpage being associated with a particular vendor;  
presenting a list of product webpages to the user, the product webpages  
being associated with a plurality of products, the plurality of products being  
associated with the particular vendor;  
receiving a request for a particular product webpage, the particular  
product webpage being associated with a particular product;  
retrieving the particular product webpage;  
obtaining a location and structural information associated with the  
particular product webpage;  
modifying the particular product webpage to provide a toolbar, the  
toolbar having at least one command associated with the particular product;  
presenting the modified particular product webpage to the user;  
receiving the command associated with the particular product from the  
user; and

storing information about the particular product in a list of products associated with the user.

5           42.    The method of claim 41, wherein extracting includes:  
parsing the product webpage into webpage elements;  
analyzing the webpage elements to identify location and structural  
information; and  
storing the location and the structural information.

10           43.    The method of claim 41, wherein the toolbar is provided in a  
space inserted at a top of the product webpage.

            44.    The method of claim 41, wherein the toolbar is provided in a  
separate frame.

15           45.    The method of claim 44, wherein the separate frame is a floating  
window.

            46.    The method of claim 41, wherein the webpage is written in a  
20   markup language.

            47.    The method of claim 46, wherein the markup language is HTML.

25           48.    The method of claim 47, wherein extracting includes:  
parsing the product webpage according to HTML tags;  
analyzing the HTML tags and accompanying text to identify URL and  
frameset information; and  
storing the URL and the frameset information.

30           49.    The method of claim 47, wherein modifying includes:



inserting a toolbar after the <BODY> marker of the product webpage.

50. The method of claim 41, further comprising:

obtaining information about the user; and

5 storing the information about the user in an account associated with the user.

51. The method of claim 50, wherein the information about the user includes a name, an address, and a phone number associated with the user.

10

52. The method of claim 50, wherein the information about the user includes credit card and payment information associated with the user.

53. The method of claim 50, wherein the information about the user includes personal preferences associated with the user.

15

54. The method of claim 50, wherein the information about the user includes demographic information associated with the user.

20

55. The method of claim 41, wherein the command is a product registration command.

56. The method of claim 41, wherein the command is a product purchase command.

25

57. The method of claim 56, further comprising:

obtaining information about a purchaser;

receiving a purchase command associated with the product from the purchaser;

30

modifying the purchase command with the information about the purchaser; and

sending the modified purchase command to the vendor.

58. The method of claim 57, wherein modifying includes:

identifying the product webpage;

5 retrieving instructions associated with completion of the command and  
the product;

retrieving the information associated with the user;

completing the command by using the instructions and the information  
associated with the user for the product webpage.

10

59. The method of claim 58, wherein identifying includes:

extracting a location and structural information associated with the  
product webpage; and

15 comparing the location and structural information with a database of  
known database of profiles.

60. The method of claim 41, further comprising:

receiving a subsequent request for the product webpage;

20 reconstructing the product webpage using the location and the structural  
information associated with the product webpage; and

presenting the reconstructed product webpage.

25

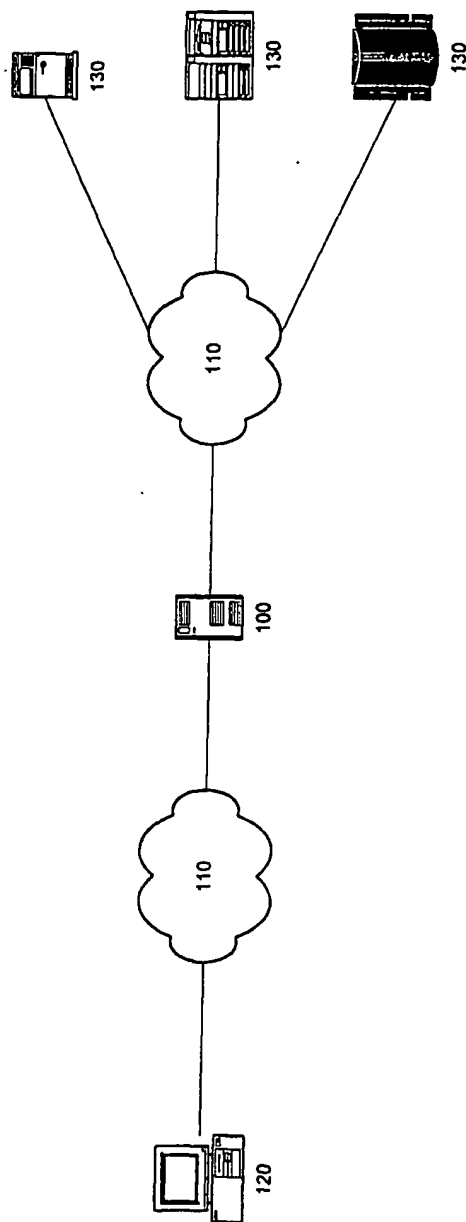


FIGURE 1A

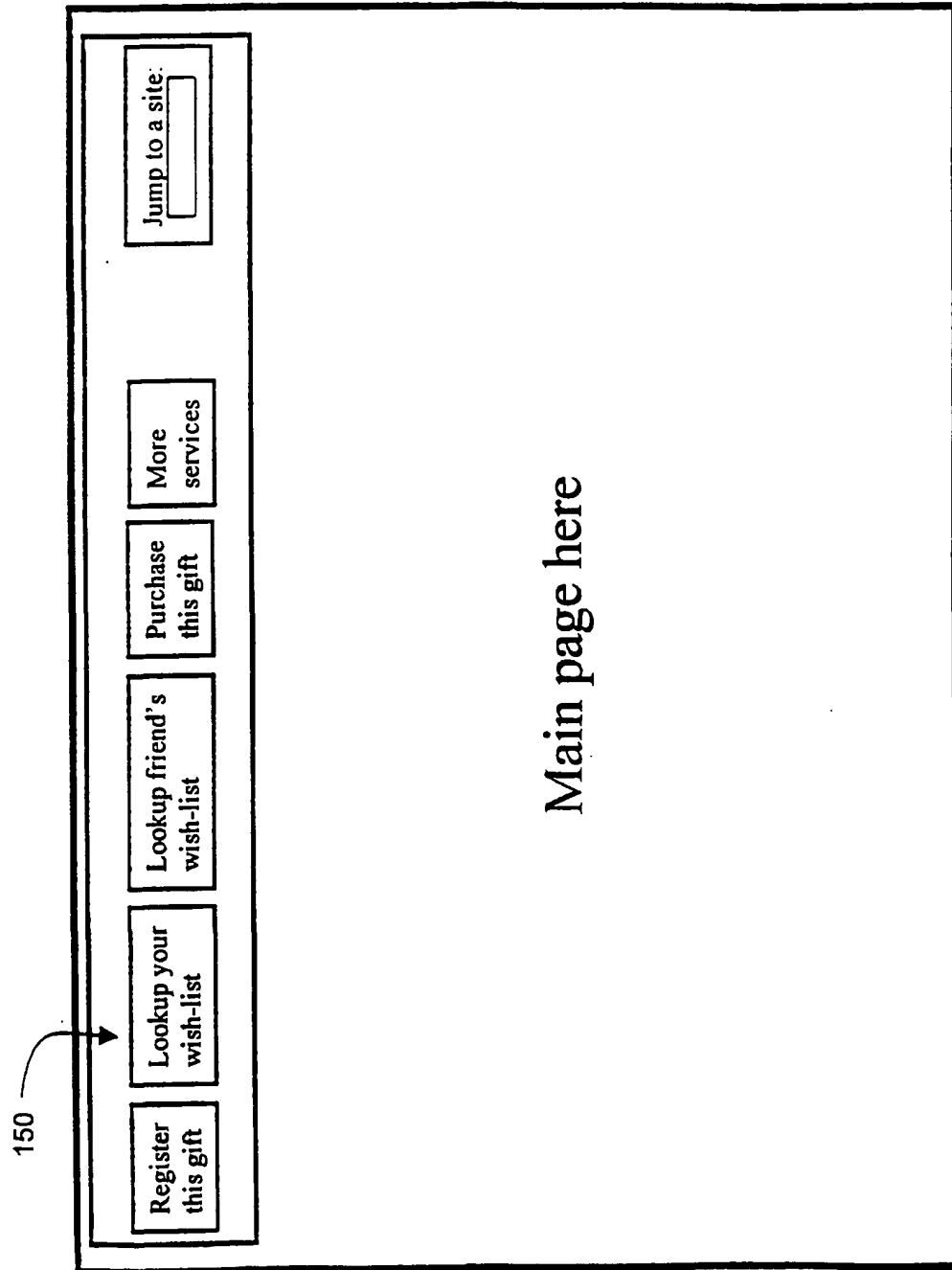


FIGURE 1B

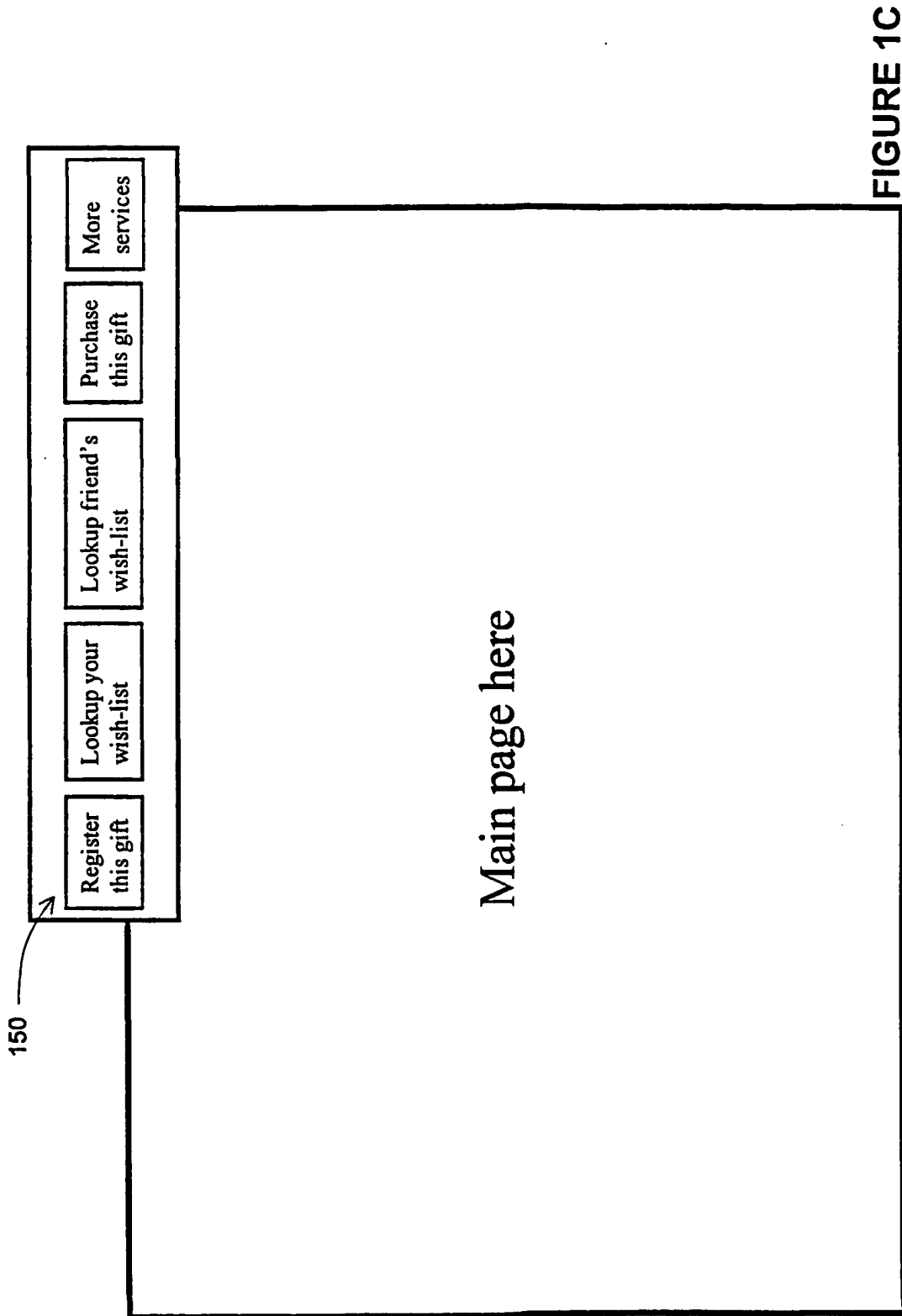
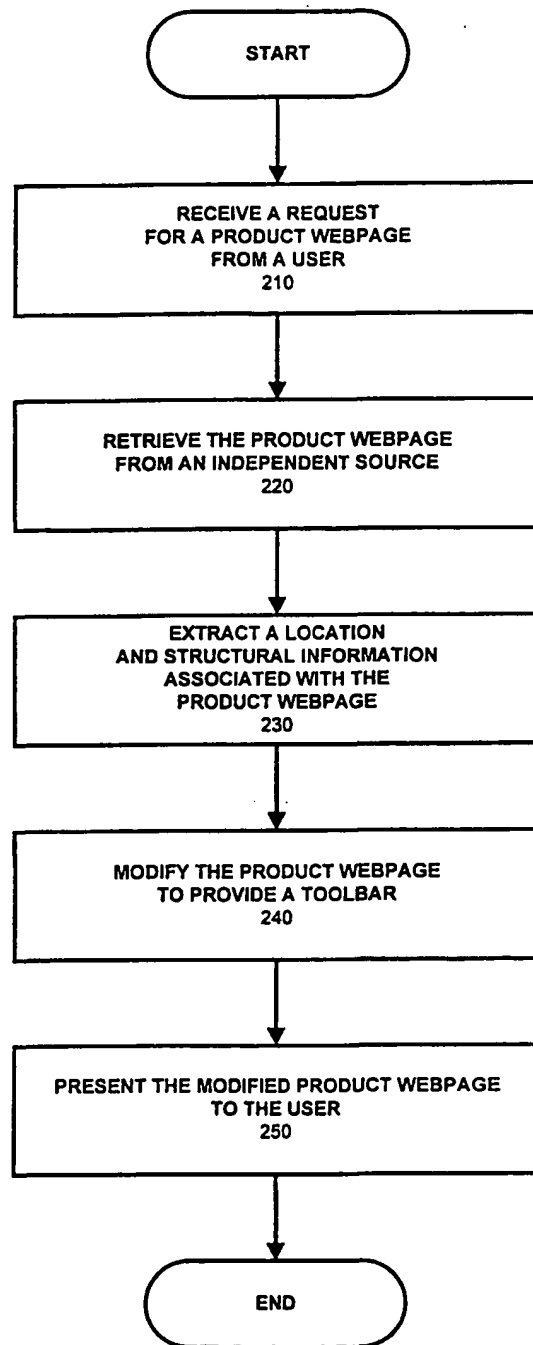


FIGURE 1C

**FIGURE 2**

# INTERNATIONAL SEARCH REPORT

Inte. onal Application No

PCT/US 00/00447

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>KOHDA Y ET AL: "UBIQUITOUS ADVERTISING ON THE WWW: MERGING ADVERTISEMENT ON THE BROWSER"</p> <p>COMPUTER NETWORKS AND ISDN SYSTEMS,NL,NORTH HOLLAND PUBLISHING. AMSTERDAM, vol. 28, 1 May 1996 (1996-05-01), pages 1493-1499, XP002037594</p> <p>ISSN: 0169-7552</p> <p>page 1494, left-hand column, line 30 -page 1495, right-hand column, line 7; figures 1,2</p> <p>page 1496, left-hand column, line 5 -page 1498, left-hand column, line 5; figures 3-5</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	<p>1,3, 6-10,13, 14,21, 23, 26-30, 33,34, 41,43, 46-50, 53,54</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

2 June 2000

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20/06/2000

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/00447

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DOORENBOS R B ET AL: "A scalable comparison-shopping agent for the World-Wide Web"</p> <p>PROCEEDINGS OF THE FIRST INTERNATIONAL CONFERENCE ON AUTONOMOUS AGENTS, PROCEEDINGS OF 1ST INTERNATIONAL CONFERENCE ON AUTONOMOUS AGENTS, MARINA DEL REY, CA, USA, 5-8 FEB. 1997, pages 39-48, XP002139314</p> <p>1997, New York, NY, USA, ACM, USA ISBN: 0-89791-877-0</p> <p>abstract</p> <p>page 41, right-hand column, line 12 -page 44, left-hand column, line 45; figure 1; table 2</p> <p>-----</p>	<p>1, 10, 15, 17-19, 21, 30, 36-39, 41, 56-59</p>